ABSTRACT

The present invention relates generally to a molecular marker for a plant physiological process and more particularly for plant embryogenesis. The molecular marker is, in one form, a genetic sequence from a monocot plant such as but not limited to oil-palm plants. In another form, the molecular marker is a polypeptide encoded by said genetic sequence. More particularly, the molecular marker of the present invention enables embryogenic tissue to be detected *in vitro*. The early detection of embryogenic tissue enables non-embryogenic tissue to be discarded. The ability to detect embryogenesis facilitates maximization of embryogenic potential. The present invention further contemplates a molecular marker comprising in one form a sequence of nucleotides encoding an antioxidant or in another form a sequence of amino acids defining a polypeptide having antioxidant activity. The antioxidant according to this aspect of the present invention is particularly useful in tablet or cream form as an anti-aging agent. The molecular markers of the present invention therefore also have uses in the inhibition or retardation of apoptotic processes. Such an effect has benefits in both plant and animal cells. The present invention further contemplates a promoter sequence encoding the molecular marker and its use in generating male sterile plants.